

OPINIONS AND DECLARATIONS RENDERED BY THE INTER- NATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Edited by

FRANCIS HEMMING, C.M.G., C.B.E.
as Secretary to the Commission

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OPINION 520

Suppression under the Plenary Powers of the specific name *tibiatrix* Laurenti, 1768, as published in the combination *Hyla tibiatrix*, and of the generic name *Acrodytes* Fitzinger, 1843, and interpretation under the same Powers of the nominal species *Rana venulosa* Laurenti, 1768 (Class Amphibia)

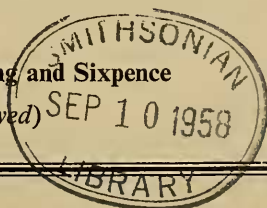
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INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

COMPOSITION AT THE TIME OF THE ADOPTION OF THE RULING GIVEN IN OPINION 520

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Professor Enrico TORTONESE (*Museo di Storia Naturale "G. Doria", Genova, Italy*) (16th December 1954)

OPINION 520

SUPPRESSION UNDER THE PLENARY POWERS OF THE SPECIFIC NAME "TIBIATRIX" LAURENTI, 1768, AS PUBLISHED IN THE COMBINATION "HYLA TIBIATRIX", AND OF THE GENERIC NAME "ACRODYTES" FITZINGER, 1843, AND INTERPRETATION UNDER THE SAME POWERS OF THE NOMINAL SPECIES "RANA VENULOSA" LAURENTI, 1768 (CLASS AMPHIBIA)

RULING :—(1) The request for the suppression under the Plenary Powers of the specific name *venulosa* Laurenti, 1768, as published in the combination *Rana venulosa*, is hereby rejected.

(2) The following action is hereby taken under the Plenary Powers :—

(a) The under-mentioned names are hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy :—

(i) the generic name *Acrodytes* Fitzinger, 1843 ;

(ii) the specific name *tibiatrix* Laurenti, 1768, as published in the combination *Hyla tibiatrix* ;

(b) It is hereby directed that the nominal species *Rana venulosa* Laurenti, 1768, be interpreted by reference to the type specimen of *Hyla zonata* Spix, 1824.

(3) The under-mentioned generic name is hereby placed on the *Official List of Generic Names in Zoology* with the Name Number 1298 :—

Phrynohyas Fitzinger, 1843 (gender : feminine)
 (type species, by monotypy and through *Declaration* 21 : *Rana venulosa* Laurenti, 1768, as interpreted under the Plenary Powers in (2)(b) above)

(4) The under-mentioned specific names are hereby placed on the *Official List of Specific Names in Zoology* with the Name Numbers severally specified below :—

(a) *venulosa* Laurenti, 1768, as published in the combination *Rana venulosa*, and as interpreted under the Plenary Powers in (2)(b) above (specific name of type species of *Phrynohyas* Fitzinger, 1843) (Name No. 1549) ;

(b) *spilomma* Cope, 1877, as published in the combination *Hyla spilomma* (Name No. 1550).

(5) The under-mentioned generic name is hereby placed on the *Official Index of Rejected and Invalid Generic Names in Zoology* with the Name Number 1182 :—

Acrodytes Fitzinger, 1843, as suppressed under the Plenary Powers in (2)(a)(i) above.

(6) The under-mentioned specific names are hereby placed on the *Official Index of Rejected and Invalid Specific Names in Zoology* with the Name Numbers severally specified below :—

(a) *tibiatrix* Laurenti, 1768, as published in the combination *Hyla tibiatrix*, as suppressed under the Plenary Powers in (2)(a)(ii) above (Name No. 538) ;

(b) *zonata* Spix, 1824, as published in the combination *Hyla zonata* (a junior objective synonym of *venulosa* Laurenti, 1768, as published in the com-

bination *Rana venulosa*, through the action taken under the Plenary Powers in (2)(b) above) (Name No. 539).

I. THE STATEMENT OF THE CASE

On 14th May 1953 Mr. William E. Duellman (*University of Michigan, Ann Arbor, Michigan, U.S.A.*) addressed a preliminary communication to the Office of the Commission on the question of the possible use of the Plenary Powers for the purpose of suppressing the specific name *venulosa* Laurenti, 1768, as published in the combination *Rana venulosa* (Class Amphibia). As the result of further correspondence Mr. Duellman submitted the following application on the above subject to the International Commission on 3rd April 1956 :—

Proposed use of the Plenary Powers to suppress the specific names “venulosa” Laurenti, 1768, as published in the combination “Rana venulosa” and “tibiatrix” Laurenti, 1768, as published in the combination “Hyla tibiatrix”, together with the generic name “Acrodytes” Fitzinger, 1843 (Class Amphibia, Order Salientia)

By WILLIAM E. DUELLMAN

(*Museum of Zoology, University of Michigan, Ann Arbor, Michigan, U.S.A.*)

The purpose of the present application is to ask the International Commission on Zoological Nomenclature to suppress the specific names *venulosa* and *tibiatrix*, both of Laurenti, 1768, as published in the combinations *Rana venulosa* and *Hyla tibiatrix* respectively.

2. The group of neotropical hyloid frogs in question are characterised by having paired lateral vocal sacs behind the angle of the jaws in the males and in the absence of any co-ossification of the skin with the roof of the skull. Until recently these frogs were considered to be only one species, but it is now realised that several species are included in the group.

3. In 1768, Laurenti (: 31) assigned the name *Rana venulosa* to a figure in Seba (1734, Vol. I, Pl. 72, fig. 4), giving the following

description : “*Corpore venulosa, maculoso, maculis confluentibus, insulsis interjectis ; pedibus digitatus.*” The locality was given as “*Indiis*”. In only one other instance has the combination *Rana venulosa* been used. This is to be found in Daudin (1802 : 24). The following year (1803) Daudin used the combination *Hyla venulosa* Laurenti (: 71). Since that time the combination *Hyla venulosa* has persisted in the literature, although the references to it are relatively few.

4. From the description given by Daudin and from careful study of his figure (1802, Pl. 13) I can find no similarity between the frog described by Laurenti and illustrated by Seba and that mentioned by Daudin. The bizarre illustration in Seba has been associated with a group of frogs, which do not resemble the figure nor the description based upon that figure. Seba's illustration most certainly is not of a hylid frog, and it is completely unrecognisable as any known member of that large group of frogs.

5. The nomenclatorial problem with *Hyla tibiatrix* is much the same as that of *Hyla venulosa*. Laurenti, 1768 (: 34) assigned the name *Hyla tibiatrix* to two figures in Seba (1734, Vol. I, Pl. 71, figs. 1—2) and gave the following description : “*Corpore dilute lactoe, maculis rubris, pedibus posticus palmatis. Mas coaxans utroque in latere colli, tibae inflat, inflat.*” The reference to locality given by Seba was “*Americanuarum*”. This name was treated as applying to a variety of *Rana venulosa* by Daudin in 1802, and in no time after that it was accorded a higher rank. The figure in Seba may reasonably be associated with any one of three genera of American hylid frogs. From the figure and description it is impossible to determine whether or not the skin is co-ossified with the skull and what is the condition of the vomerine teeth. These are characters that must be known to separate the genera in question.

6. Since the figure upon which the original description of *Rana venulosa* was based is unrecognisable as a member of the genus, and since the figure upon which the description of *Hyla tibiatrix* was based is not recognisable to genus, the specific names *venulosa* and *tibiatrix*, as published in the combinations *Rana venulosa* Laurenti, and *Hyla tibiatrix* Laurenti respectively should be considered *nomina dubia*.

7. A recent study of this group of frogs shows that the former wide-ranging “*Hyla venulosa*” actually is a composite of several species, the names of most of which have been hidden in the synonymy of *Hyla venulosa*. The oldest available names that can definitely be assigned to the two most widely distributed of these species are *Hyla spilomma* Cope, 1877 (: 86) and *Hyla zonata* Spix, 1824 (: 41). The first of these species ranges throughout eastern Mexico and northern

Central America. The original description, accompanied by the definite type locality, are sufficient to identify this species beyond question. The latter species, *Hyla zonata*, occurs in the Amazon Basin of South America and extends into southern Central America. The original description, locality, and accompanying colour plate identify the nominal species with the population of these frogs occurring in the Amazon Basin. Although *Hyla zonata* was described in 1824 and *Hyla spilomma* in 1877, both have, for the most part, been referred to the synonymy of *Hyla venulosa*. It is recommended that, as part of the settlement represented by the proposed suppression of the *nomina dubia*, *Rana venulosa* Laurenti and *Hyla tibiatrix* Laurenti, these two specific names should be placed on the *Official List of Specific Names in Zoology*.

8. "*Hyla venulosa*" is the type species of the genus *Acrodytes* Fitzinger, 1843 (: 30). The suppression of the type species of this genus creates another nomenclatorial problem. However, the circumstances are such that Fitzinger solved the problem himself. In his *Systema Reptilium* published in 1843 he listed eleven genera of hylid frogs, the third of which is *Phrynohyas* (: 30), under which he listed four subgenera :

Phrynohyas—

| | |
|-------------------------------|---|
| <i>Cephalophractus</i> Fitz. | <i>Cephalo. galeatus</i> Fitz. |
| <i>Trachycephalus</i> Tschud. | <i>Trachycephalus nigromaculatus</i> Tschud. |
| <i>Phrynohyas</i> | <i>Hyla zonata</i> Spix |
| <i>Acrodytes</i> | <i>Hyla venulosa</i> Daudin |

9. The type species (by monotypy) of *Phrynohyas* Fitzinger is thus *Hyla zonata* Spix. The specific name *zonata* is the oldest available specific name for the group of hylid frogs with paired lateral vocal sacs behind the angle of the jaws and without the skin co-ossified with the skull. The subgeneric name *Acrodytes* Fitzinger was not accompanied by a description or a figure and rests solely upon the single included species *Hyla venulosa*, which is the type species by monotypy of the taxon so named. That species, as already noted, is not identifiable, but if it had clearly been a species congeneric with *Hyla zonata* Spix, the name *Acrodytes* would have fallen as a junior synonym of *Phrynohyas* Fitzinger, for the latter was introduced as the name of a genus, while *Acrodytes* was proposed only as the name for one of the units accepted by Fitzinger as subgenera of that genus. Since *Hyla venulosa* is unidentifiable, the genus *Acrodytes* of which it is the type species is also unidentifiable. The name *Acrodytes* Fitzinger should therefore be suppressed by the Commission under its Plenary Powers. For those

who consider the hylid frogs from Mexico and Central and South America to be a generically distinct group, the generic name which must be used is *Phrynohyas* Fitzinger.

10. In order to prevent further taxonomic confusion as to the concept of "*Hyla venulosa*", I ask the International Commission on Zoological Nomenclature :—

(1) to use its Plenary Powers to suppress the under-mentioned names for the purposes of the Law of Priority but not for those of the Law of Homonymy :—

(a) the generic name *Acrodytes* Fitzinger, 1843 ;

(b) the under-mentioned specific names :—

(i) *venulosa* Laurenti, 1768, as published in the combination *Rana venulosa* ;

(ii) *tibiatrix* Laurenti, 1768, as published in the combination *Hyla tibiatrix* ;

(2) to place the under-mentioned generic name on the *Official List of Generic Names in Zoology* :—*Phrynohyas* Fitzinger, 1843 (gender : feminine) (type species, by monotypy : *Hyla zonata* Spix, 1824) ;

(3) to place the under-mentioned specific names on the *Official List of Specific Names in Zoology* :—

(a) *zonata* Spix, 1824, as published in the combination *Hyla zonata* (specific name of type species of *Phrynohyas* Fitzinger, 1843) ;

(b) *spilomma* Cope, 1877, as published in the combination *Hyla spilomma* ;

(4) to place the under-mentioned generic name on the *Official Index of Rejected and Invalid Generic Names in Zoology* :—*Acrodytes* Fitzinger, 1843, as suppressed under the Plenary Powers under (1) above ;

(5) to place on the *Official Index of Rejected and Invalid Specific Names in Zoology* the specific names specified in (1)(b) above, as there suppressed under the Plenary Powers.

References

Cope, Edward D., 1877. Tenth Contribution to the Herpetology of Tropical America, *Proc. Amer. phil. Soc.*, 17(100) : 85—98

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- Seba, Albertus, 1734. *Locupletissimi rerum naturalium thesauri accurata descriptio, et inconibus artificissimus expressio, per universam physices historiam*. Amsterdam, I : pp. i—xxxiv, 1—178, Pls. I—CXI
- Spix, J. B. de, 1824. *Animalia Nova Sive Species Novae Testudinum et Ranarum*. Monachi, pp. 1—53, Pls. I—XXII

II. THE SUBSEQUENT HISTORY OF THE CASE

2. Registration of the present application : Upon the receipt of Mr. Duellman's preliminary communication the question of the suppression under the Plenary Powers of the specific name *venulosa* Laurenti, 1768, as published in the combination *Rana venulosa* (Class Amphibia) was allotted the Registered Number Z.N.(S.) 771.

3. Publication of Mr. Duellman's application : Mr. Duellman's application was sent to the printer on 20th April 1956 and was published on 20th July of that year in Part 5 of Volume 12 of the *Bulletin of Zoological Nomenclature* (Duellman, 1956, *Bull. zool. Nomencl.* **12** : 143—146).

4. Issue of Public Notices regarding Mr. Duellman's application : Under the revised procedure prescribed by the Thirteenth International Congress of Zoology, Paris, 1948 (1950, *Bull. zool. Nomencl.* **4** : 51—56), Public Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in regard to Mr. Duellman's application was given on 20th July 1956 (a) in Part 5 of Volume 12 of the *Bulletin*

of *Zoological Nomenclature* (the Part in which the application in question was published) and (b) to the other prescribed serial publications. In addition such Notice was given to four general zoological serial publications and to two specialist serials in Europe and America.

5. Receipt in August 1956 of a counter-proposal from Robert Mertens (Senckenbergische Naturforschende Gesellschaft, Frankfurt a.M., Germany): On 11th August 1956 Professor Robert Mertens (*Senckenbergische Naturforschende Gesellschaft, Frankfurt a.M., Germany*) addressed a communication to the Office of the Commission, in which, while supporting the greater part of the application submitted by Mr. Duellman, he took strong objection to the proposal that the specific name *venulosa* Laurenti, 1768, as published in the combination *Rana venulosa*, should be suppressed under the Plenary Powers. On this subject Professor Mertens took the view that so well-known a name ought to be preserved and that for this purpose the nominal taxon so named should be interpreted by the Commission by the issue of a direction under the Plenary Powers that the nominal species so named be interpreted by reference to the type specimen of a clearly recognisable nominal species of later date. He suggested that the type specimen of the nominal species *Hyla zonata* Spix, 1824 would be suitable for this purpose. The counter-proposal so submitted by Professor Mertens was as follows:—

Proposed use of the Plenary Powers to identify the nominal species
 “*Hyla venulosa*” Laurentus, 1768, with the nominal species
 “*Hyla zonata*” Spix, 1824. (Supplement to application by
 W. E. Duellman) (Class Amphibia)

By ROBERT MERTENS

(*Senckenbergische Naturforschende Gessellchaft,*
Frankfurt a.M., Germany)

On the proposal by Duellman for the suppression of the name *Hyla venulosa* Laurentus, 1768 (1956, *Bull. zool. Nomencl.* **12** : 143—146) I have the following observations to make.

2. The name *Hyla venulosa* Laurentus is so well known to every herpetologist as the name for a neotropical species of tree-frog that I should regret to see its disappearance from the literature and its replacement by the completely unknown name *Hyla zonata* Spix, 1824. It is, in my opinion, one of the most important duties of the International Commission to preserve names which are in common use in cases where there is agreement among specialists as to the species to which those names are applied. Such names should not be rejected by too rigorous an interpretation of the Rules.

3. In the present case I recommend that the specific name *venulosa* Laurentus, 1768, should be preserved by the Commission for use in its accustomed sense, that is, in the sense of *zonata* Spix, 1824, as published in the combination *Hyla zonata*, as cited in Duellman's application. Under this proposal the name *Hyla zonata* Spix would become a junior objective synonym of *Hyla venulosa* Laurentus. The latter name would become also the oldest name objectively applicable to the species which is the type species of *Phrynohyas* Fitzinger, 1843. I agree with Duellman that the name *Phrynohyas* Fitzinger, 1843, should be given preference over *Acrodytes* Fitzinger, 1843, if *Hyla venulosa* Laurentus is separated from the genus *Hyla* Laurentus.

6. Receipt in August 1956 of a counter-proposal from Hobart M. Smith (University of Illinois, Department of Zoology, Urbana, Illinois, U.S.A.) : A few days subsequent to the receipt of the counter-proposal submitted by Professor Mertens reproduced in the immediately preceding paragraph a letter dated 8th August 1956 was received from Professor Hobart M. Smith (*University of Illinois, Department of Zoology, Urbana, Illinois, U.S.A.*) in which a counter-proposal very similar to that submitted by Professor Mertens was put forward for consideration. Upon receipt of this letter the Secretary informed Professor Smith of the counter-proposal already received from Professor Mertens and suggested that from a procedural point of view it would be convenient if these two counter-proposals could be consolidated. Professor Smith accepted this suggestion and in a letter dated 16th October 1956 (reproduced in paragraph 12 below) withdrew his counter-proposal in favour of that already submitted by Professor Mertens with which he fully associated himself.

7. Communication to William E. Duellman of the counter-proposal received from Robert Mertens and Hobart M. Smith :

On 22nd August 1956 the Secretary notified Mr. William E. Duellman of the counter-proposals received from Professor Robert Mertens and Professor Hobart M. Smith respectively, and invited him to furnish his comments thereon. The statement later furnished by Mr. Duellman in response to the foregoing request is reproduced in paragraph 18 below.

8. Publication in October 1956 of the counter-proposal submitted by Robert Mertens : The counter-proposal submitted by Professor Robert Mertens (paragraph 5 above) was sent to the printer on 3rd October 1956 and on 31st of the same month it was published in Part 10 of Volume 12 of the *Bulletin of Zoological Nomenclature* (Mertens, 1956, *Bull. zool. Nomencl.* **12** : 287).

9. Issue of Public Notices in relation to the counter-proposal submitted by Robert Mertens : Under the revised procedure prescribed by the Thirteenth International Congress of Zoology, Paris, 1948 (1950, *Bull. zool. Nomencl.* **4** : 51—58), Public Notice of the possible use of the Plenary Powers in relation to the counter-proposal submitted by Professor Robert Mertens was given on 31st October 1956 (a) in Part 10 of Volume 12 of the *Bulletin of Zoological Nomenclature* (the Part in which Professor Mertens' counter-proposal was published) and (b) to the other prescribed serial publications. In addition, such Notice was given also to the general zoological serials and to the specialist serials to which Notice of Mr. Duellman's original application had been given at the time of its publication in July 1956 (paragraph 4 above).

10. Extension to 1st May 1957 of the Prescribed Waiting Period in respect of the present case : On 31st October 1956 Mr. Hemming executed a Minute directing the Prescribed Waiting Period be extended from 20th January 1957, the date of the expiry of the six months from the date of publication of Mr. Duellman's original application to 1st May 1957, the date on which would close the period of six months following the publication of Professor Mertens' counter-proposal.

11. Comments received subsequent to the publication in October 1956 of Robert Mertens' counter-proposal : In the six-month period following the publication in October 1956 of Professor Robert Mertens' counter-proposal comments were received from

six specialists (all in the United States), of whom four supported Professor Mertens' counter-proposal and two, the original proposal by Mr. William E. Duellman. After the close of the Prescribed Six-Month Period (as extended in the manner described in paragraph 10 above) and after the Voting Paper relating to the present case (paragraph 21 below) had been issued to the Commission one of the specialists (James A. Peters) who had previously notified his support for the Mertens counter-proposal intimated his desire to withdraw his previous communication and to substitute for it a note in opposition to that counter-proposal. The communications so received (other than the original statement later withdrawn by Dr. James A. Peters) are reproduced in the immediately following paragraphs.

12. Support for the Mertens counter-proposal received from Hobart M. Smith (University of Illinois, Department of Zoology, Urbana, Illinois, U.S.A.): On 16th October 1956 Professor Hobart M. Smith (*University of Illinois, Department of Zoology, Urbana, Illinois, U.S.A.*) addressed the following letter to the Office of the Commission in which (as explained in paragraph 6 above) he withdrew the counter-proposal which he had himself submitted in August 1956 in favour of the counter-proposal in the same sense (paragraph 5 above) previously received from Professor Mertens (Smith, 1956, *Bull. zool. Nomencl.* **12** : 307—308) :—

In my opinion all of the requests embodied in the application Z.N.(S.) 771 submitted by William E. Duellman (1956, *Bull. zool. Nomencl.* **12** : 143—146) merit approval by the International Commission with the exception of Proposal (1)(b)(i) in paragraph 10 where he recommends that the specific name *venulosa* Laurenti, 1768, as published in the combination *Hyla venulosa* be suppressed under the Plenary Powers. In connection with this proposed exception, I think it right to draw the attention of the Commission to the following facts namely : (a) that the name *venulosa* in the combination *Hyla venulosa* has been almost universally applied to this species-group (up until recently thought to represent but one species) for over 150 years ; (b) that the name is particularly appropriate for some member of this species-group, which possesses a powerful integumentary poison ; (c) that in view of these facts preservation of the name for some member of this group would seem appropriate especially since such preservation would in no way disturb the established nomenclature but would on

the contrary maintain it ; (d) that the name may, as a *nomen dubium*, arbitrarily be restricted to the species that most appropriately might bear the name, in lieu of a later but less familiar and less appropriate *nomen indubium*.

With these considerations in mind I wrote a letter to the Office of the Commission in which I suggested that, instead of suppressing the specific name *venulosa* Spix, as proposed by Duellman, the Commission should use its Plenary Powers definitely to attach that name either to the specimen upon which Spix in 1824 based his nominal species *Hyla zonata* or to the specimen upon which in 1877 Cope based his nominal species *Hyla spilomma*. In making this suggestion, I expressed a preference for the adoption of the first of these alternatives rather than the second (a) because the nominal species *Hyla venulosa* Laurenti has been commonly interpreted as representing a species having a South American center of distribution and (b) because the specific name *zonata* Spix has enjoyed scarcely any usage at all, whereas the name *spilomma* Cope has been in common use since 1945 for a Mexican and Central American species.

I have since been informed by the Secretary that a formal application for the use by the Commission of its Plenary Powers for the purpose of linking the names *venulosa* Laurenti and *zonata* Spix (thus making the two names objective synonyms of one another) has been received from Professor Robert Mertens of Frankfurt a.M. This is exactly the solution which I myself favor and in the circumstances I have pleasure in withdrawing my proposal and in submitting in its place the present note of support for the proposal recommended by Professor Mertens.

13. Support for the Mertens counter-proposal received from A. Loveridge (Museum of Comparative Zoology at Harvard College, Cambridge, Massachusetts, U.S.A.) : On 12th December 1956 Dr. A. Loveridge (*Museum of Comparative Zoology at Harvard College, Cambridge, Massachusetts, U.S.A.*) addressed the following note to the Office of the Commission in support of Dr. Mertens' counter-proposal :—

I think Professor Mertens' proposal to make *zonata* Spix serve also as the type for *venulosa* a practical solution.

14. Support for the Mertens counter-proposal received from Karl P. Schmidt (Chicago Natural History Museum, Chicago, Illinois, U.S.A.) : During the six-month period following the publication of Professor Robert Mertens' counter-proposal, two letters in regard to this case were received from Dr. Karl P. Schmidt (*Chicago Natural History Museum, Chicago, Illinois, U.S.A.*) in regard to the present case. In the first of these letters, which was

written before Dr. Schmidt had seen Professor Mertens' counter-proposal, strong opposition to the proposal submitted by Mr. William E. Duellman was expressed ; in the second letter, which was written after Dr. Schmidt had seen Professor Mertens' paper, equally strong support was given to the action there recommended. The letters so received are reproduced below:—

**(a) Letter dated 17th December 1956 from Karl P. Schmidt
expressing objection to the proposal submitted by William
E. Duellman**

The proposal by William E. Duellman, reference number Z.N.(S.) 771 to suppress the specific names *venulosa* Laurenti, 1768 and *tibiatrix* Laurenti, 1768, together with the generic name *Acrodytes* Fitzinger, 1843 is hereby strongly protested.

Duellman's statement of the facts concerning the Seba figure, reference to which serves as the description of *Rana venulosa* Laurenti, are startlingly false. In particular, he states that "Seba's illustration most certainly is not a hylid frog, and it is completely unrecognizable as any known member of that large group of frogs." In his paper reviewing the frogs in question (not cited in the application to the Commission) he states "There are no webs or toe discs" and (2) "furthermore, there is a dorsolateral fold!" Contrary to these statements I affirm that the digital pads are recognisable on the Seba figure. I can affirm further, from the examination of specimens that had been examined by Duellman himself, that most museum specimens do have dorso-lateral folds, and that these may be more pronounced than in any frog in which they normally occur. The folds are unquestionably produced by shrinkage in preservation, and thus are not invariable ; but they do appear as dorso-lateral folds rather than haphazardly on the frog's body.

The fact that the figure in question does not exhibit palmation of the digits, whereas all of the forms related to *Hyla venulosa* have both fingers and toes webbed, remains as the principle discrepancy between figure and frog ; this discrepancy may be set down to bad preservation and to bad drawing. Mr. Duellman does not seem to know that many of the Seba specimens are dried mummies, or are otherwise badly preserved, and he seems to demand of the artist a quality of animal drawing all but unknown in his age. Finally, the profile of the head is definitely that of a hylid frog, reasonably like that of *Hyla venulosa* auct.

It is accordingly urged that the application of Mr. Duellman be rejected. If the name *venulosa* be preserved, it may most adequately be restricted to the species of the group found in northern South

America, its type locality fixed as Surinam by the reference in Duméril and Bibron to Madam Merian's figure of 1705.

(b) Letter dated 15th January 1957 from Karl P. Schmidt supporting the counter-proposal submitted by Robert Mertens

(Schmidt, 1957, *Bull. zool. Nomencl.* 13 : 101)

It is very gratifying to learn that Dr. Mertens has an alternative proposal to that of Duellman with respect to *Hyla venulosa*, and that it is supported by my valued colleagues, Hobart Smith and Arthur Loveridge. I strongly support Dr. Mertens' plan for the preservation and fixation of this name.

15. Support for the Duellman proposal received from Edward H. Taylor (University of Kansas, Lawrence, Kansas, U.S.A.) : On 16th February 1957 Dr. Edward H. Taylor (*University of Kansas, Lawrence, Kansas, U.S.A.*) addressed the following letter to the Office of the Commission in support of Mr. Duellman's proposal :—

Concerning *Hyla venulosa*, I think it very unfortunate that an attempt should have been made to conserve the trivial name *venulosa*, much as I agree to the general principle of conserving old names. It is true, the name appears frequently in literature, largely because many writers of small experience and knowledge with these frogs have applied the name to a series of populations of the genus *Phrynohyas* that they have either not been able to identify—or because they have regarded all as belonging to a single species. Actually, these populations represent six or seven species.

It would appear that Doctor Mertens and Doctor Smith, concerned primarily with the principle of conservation, have overlooked the facts or have not concerned themselves with the effect of the plan on the general taxonomy of the genus as a whole.

I would urge that Duellman's proposal regarding this name be accepted as a whole.

16. Support for the Duellman proposal received from Jay M. Savage (University of Southern California, Los Angeles, California, U.S.A.) : On 15th April 1957 there was received in the Office of the Commission a letter dated 11th April 1957 from Dr. W. I. Follett (*California Academy of Sciences, San Francisco, California,*

U.S.A.), who, as Chairman of the Committee on Zoological Nomenclature of the American Society of Ichthyologists and Herpetologists, then communicated the views on the present case expressed by the herpetological members of the Committee. Of these, two members (Hobart M. Smith ; Edward H. Taylor) had already communicated statements of their views on this case to the Commission (paragraphs 6 and 15 above respectively). A third member (James A. Peters) on this occasion supported the Mertens counter-proposal (paragraph 11 above) but later withdrew that support (see paragraph 17 below). The fourth member whose views were communicated by Dr. Follett was Dr. Jay M. Savage (*University of Southern California, Los Angeles, California, U.S.A.*) who supported the Duellman proposal and was opposed to the Mertens counter-proposal. The statement by Dr. Savage so communicated was as follows :—

I am completely in favor of the application submitted to the Commission by William E. Duellman (Z.N.(S.) 771). I cannot agree with either Mertens or Smith in their attempt to substitute the long confused, misidentified and composite name *Hyla venulosa* auctorum (nec Laurenti) for the clearly identifiable name *Hyla zonata*. The name *venulosa* has been misused for so many different species, as so firmly indicated by Duellman, that absolutely no grounds are available for fixing it to one population or another. No stability could result where a name has been used for six or so different species populations. I regard Duellman's request as the only logical solution to the problem. He sweeps all the confusion by the simple expedient of getting rid of a name (*venulosa*) based on an Asian Frog of the Family RANIDAE. Mertens and Smith actually are contributing to confusion not to stability by attempting to attach the name *venulosa* erroneously applied by many authors to various species of frogs of the Family HYLIDAE occurring from Mexico to Argentina, to a single Amazonian form.

I thus vote to support Duellman's proposal and reject the arguments of Mertens and Smith.

17. Support for the Duellman proposal received from James A. Peters (Brown University, Department of Biology, Providence, Rhode Island, U.S.A.) : On 26th July 1957 Dr. James A. Peters (*Brown University, Department of Biology, Providence, Rhode Island, U.S.A.*) addressed a letter to the Office of the Commission in which he withdrew his previous support for the Mertens counter-proposal (paragraphs 11 and 16 above) and intimated as follows his adherence to the original Duellman proposal :—

In view of the fact that the name *Rana venulosa* Laurenti, 1768 has not been applied consistently to any single biological entity, and has existed in a state of confusion for many years, it appears that it would be much more satisfactory to utilize the name *Hyla zonata* Spix, 1824, for the taxon to which Duellman has applied it (1956, *Misc. Publ. Mus. Zool. Univ. Mich.*, No. 96 : 35). I am not in agreement with the counter-proposal by Dr. Mertens to validate *Hyla venulosa* through use of the Plenary Powers.

18. Comment by William E. Duellman (the applicant in the present case) on the Mertens counter-proposal : On 11th January 1957 Mr. William E. Duellman, the applicant in the present case, communicated to the Office of the Commission the following statement of his views on the Mertens counter-proposal which he had prepared in response to the invitation addressed to him by the Secretary on 22nd August 1956 (paragraph 7 above) (Duellman, 1957, *Bull. zool. Nomencl.* 13 : 99—100) :—

Mertens and Smith have supported my proposals dealing with the use of the Plenary Powers to suppress certain specific names and one generic name of Neotropical Hylidae, except for the suppression of the specific name *venulosa* Laurenti. Each stated that the name *venulosa* is so well known and has been so widely used that it should not be suppressed. The above authors have proposed that the Commission use its Plenary Powers to link the specific name *venulosa* Laurenti with the specific name *zonata* Spix, making the name *zonata* Spix a junior objective synonym of *venulosa* Laurenti. Mertens and Smith believe *zonata* Spix to be the least known of the other species concerned. Their proposal may be nomenclaturally acceptable, but I believe it to be both nomenclaturally and biologically impractical for the reasons given below.

2. The name *venulosa* Laurenti is well known and has been widely used only as a name, not as a specific name in reference to any known population of hylid frogs. The name *venulosa* has been applied to a group of hylid frogs now known to be a generic assemblage of seven species. The literature references are, for the most part, concerned with this combination of seven species. Consequently, the name has been widely used, but not in reference to some given species of frog, and the fact that it has been widely used can hardly be used in support of the proposals of Mertens and Smith that would link the name with a given population of frogs.

3. There is no biological or nomenclatural basis for linking the name *venulosa* Laurenti with the name *zonata* Spix. The name *zonata* Spix is based upon a specimen of hylid frog from the Upper Amazon Basin

in Brazil and is applicable to a population of frogs inhabiting the Amazon Basin. The name *venulosa* Laurenti is based upon a plate in Seba that is unidentifiable with any known hylid frog. Each of the seven species in this assemblage, now known as the genus *Phrynohyas*, is well defined with a definite range and a type locality that is known to be exact or approximate. Therefore, there is no just reason for using the name *venulosa* for the population now called *zonata*, nor is there any just reason for applying the name *venulosa* to any of the other populations.

4. There is no evidence for the fact that the *Hyla venulosa* of Laurenti originated from South America, possibly not even the western hemisphere. Wholesale restriction of type localities has served no practical purpose, and in many cases these restrictions are unwarranted to the extent that the type locality is not within the natural range of the species or subspecies. Such unmerited restriction of type localities, as would be involved in the case of the name *venulosa* Laurenti, can only lead to confusion, not only as regards the nomenclature, but as regards the biology of the species. They should be discouraged by the Commission.

5. The name *zonata* Spix is the type species of the genus *Phrynohyas* Fitzinger. The name *venulosa* Laurenti is the type species of the genus *Acrodytes* Fitzinger. (Both of these genera were proposed on the same page as subgenera of the genus *Phrynohyas*, also proposed by Fitzinger on the same page. The genus and subgenus *Phrynohyas* have line priority over *Acrodytes*.) The use of the Plenary Powers to link the name *venulosa* Laurenti to the name *zonata* Spix, thereby reducing *zonata* to a junior objective synonym of *venulosa*, would place the generic name *Phrynohyas* as a synonym of *Acrodytes*. Since neither generic name was accompanied by a description, but only a named type species, the characteristics of the genus rest upon the description of the type species. *Phrynohyas* is based upon a well-described and figured specimen, whereas *Acrodytes* is based upon the non-informative description of Laurenti, which, in turn is based upon a weird plate in Seba. The linking of the name *venulosa* Laurenti with the name *zonata* Spix would thereby bring about great confusion of the genera and synonymize the one genus that is truly applicable.

6. I believe that the principles of *nomina conservanda*, although applicable, should not be exercised in the present case, for the results will be more confusing than the present state of affairs. On the basis of the reasons given above I cannot agree with the proposals submitted by Mertens and Smith. I feel that the only way to correct the existing state of confusion is for the Commission to use its Plenary Powers to suppress the specific name *venulosa* Laurenti.

7. Few workers have become involved with this nomenclatural problem; expressions of the confusion may be found in Cochran

(1955 : 55) and Taylor (1944 : 63—64 and 67, and 1952 : 799—800). The generic and specific status has been discussed at length in the systematic revision of the group by Duellman (1956 : 57—58 and 36—37).

References

- Cochran, Doris M., 1955. "Frogs of Southeastern Brazil" *Bull. U.S. nat. Mus.* **206** : 1—423
- Duellman, William E., 1956. "The Hylid Genus *Phrynohyas* Fitzinger, 1843" *Misc. Publ. Mus. Zool. Univ. Mich.* **96** : 1—47
- Taylor, Edward H., 1944. "The Hylid Genus *Acrodytes* with Comments on Mexican Forms" *Kans. Univ. Sci. Bull.* **30**(1) (No. 6) : 63—68
- Taylor, Edward H., 1952. "A Review of the Frogs and Toads of Costa Rica" *Kans. Univ. Sci. Bull.* **35**(5) : 577—942

19. Consideration in April 1957 of the procedural problems involved in the present case : In April 1957 consideration was given by the Secretary to the question of the procedure to be adopted at the close of the Prescribed Six-Month Waiting Period for obtaining a decision from the Commission on the issues involved in the present case. The survey then undertaken showed that, while specialists in the group concerned were sharply divided on the question whether the specific name *venulosa* Laurenti, 1768, as published in the combination *Rana venulosa*, should be suppressed under the Plenary Powers (the Duellman proposal) or alternatively should be retained after having been interpreted under the same Powers (the Mertens counter-proposal), there was substantial agreement as regards all the remaining parts of the Duellman proposal. Mr. Hemming accordingly took the view that the most convenient course would be for the Commission to take two separate votes on the present case. Under the first of these it would be asked to vote on all parts of the Duellman proposal, other than that relating to the specific name *venulosa* Laurenti, 1768 (*Rana*), thus clearing the ground for a decision on the major issue involved. In the second vote the Commission would be invited to vote affirmatively on one or other of the alternative courses which had been submitted, namely (i) for the use of the Plenary Powers for the purpose of interpreting the

nominal species *Rana venulosa* Laurenti, 1768 (Mertens plan) (Alternative "A") or (ii) for the use of the above Powers to suppress the specific name *venulosa* Laurenti, 1768, as published in the combination *Rana venulosa*, for the purposes of the Law of Priority but not for those of the Law of Homonymy (Duellman plan) (Alternative "B").

20. Submission to the Commission by the Secretary in May 1957 of a Report on the present case with particulars of the procedure proposed to be adopted for reaching a decision on the issues involved : On 1st May 1957 Mr. Hemming, as Secretary, prepared for the consideration of the Commission the following Report on the present case in which also were given particulars of the procedure proposed to be adopted for reaching a decision on the issues involved :—

Mr. W. E. Duellman's application for the suppression under the Plenary Powers of the specific name "venulosa" Laurenti, 1768, as published in the combination "Rana venulosa" and Professor R. Mertens' counter-proposal in regard thereto (Class Amphibia)

By FRANCIS HEMMING, C.M.G., C.B.E.

(Secretary to the International Commission on Zoological Nomenclature)

The present note, which is being submitted concurrently with Voting Paper V.P.(57)40, is concerned with a proposal relating to the specific name *venulosa* Laurenti, 1768, as published in the combination *Rana venulosa* (Class Amphibia), submitted by Mr. William E. Duellman (Museum of Zoology, University of Michigan, Ann Arbor, Michigan, U.S.A.) and with a counter-proposal on one aspect of that application later submitted by Professor Robert Mertens (*Senckenbergische Naturforschende Gesellschaft, Frankfurt a.M., Germany*).

2. In his application (Duellman, July 1956, *Bull. zool. Nomencl.* 12 : 193—196) Mr. Duellman drew attention to the fact that the well-known name *venulosa* Laurenti, 1768, as published in the combination *Rana venulosa*, could not be interpreted with certainty, pointed out that recent work had shown that several species of Hylid frogs had been confused by later authors under this name and recommended that, in order to place the nomenclature of this group on a firm basis the specific name *venulosa* Laurenti, 1768, as published in the combination *Rana venulosa*, together with the specific name *tibiatrix* Laurenti, 1768, published in combination with the generic name

Hyla and also judged to be unrecognisable, should be suppressed under the Plenary Powers. Mr. Duellman recommended also that the generic name *Acrodytes* Fitzinger, 1843, should be suppressed, since, as *Rana venulosa* Laurenti was the type species of the genus so named, that genus would become indeterminate and valueless if (as proposed) the specific name *venulosa* Laurenti were to be suppressed under the Plenary Powers.

3. Public Notice of the possible use of the Plenary Powers in the present case was given in the prescribed manner at the time of the publication of Mr. Duellman's application in the *Bulletin of Zoological Nomenclature*. In addition, such Notice was given also to four general zoological serial publications and to two specialist serials in Europe and America respectively. The counter-proposal subsequently submitted by Professor R. Mertens (paragraph 4) also involved the possible use of the Plenary Powers and accordingly on the publication of Professor Mertens' paper in the *Bulletin* a fresh Public Notice was issued in like manner to that described above in relation to Mr. Duellman's original proposal.

4. Following the publication of Mr. Duellman's application letters were received both from Professor Mertens and from Professor Hobart M. Smith (*University of Illinois, Urbana, Illinois, U.S.A.*) objecting to the proposed suppression of the specific name *venulosa* Laurenti on the ground that such a well-known name ought not to be discarded, the proper course, in their view, being for the Commission to give a ruling as to how the species so named should be interpreted, thus making possible its continued use. This led to the submission by Professor Mertens of a counter-proposal on this portion of Mr. Duellman's application. The concrete recommendation submitted by Professor Mertens to this end was that the Commission should use its Plenary Powers to direct that the nominal species *Rana venulosa* Laurenti be interpreted by reference to the type specimen of the later-established nominal species *Hyla zonata* Spix, 1824. This nominal species, all the specialists concerned agree, is clearly identifiable and the action proposed would thus provide a secure basis for the interpretation of the name *venulosa* Laurenti. As pointed out in Mr. Duellman's original application the name *zonata* Spix has commonly been cited in the synonymy of *venulosa* Laurenti. It is stated that, apart from being cited in synonymies of *venulosa* Laurenti, the name *zonata* Spix has not been widely used and therefore that its disappearance as a junior objective synonym of *venulosa* Laurenti would cause no confusion or inconvenience. Professor Mertens' counter-proposal was published in October 1956 (*Bull. zool. Nomencl.* 12 : 287).

5. I communicated Professor Mertens' counter-proposal to Mr. Duellman for observations and on 11th January 1957 he furnished me with a statement in which he re-affirmed his request for the suppression

of the specific name *venulosa* Laurenti. The note so furnished was published in March 1957 (Duellman, 1957 *Bull. zool. Nomencl.* **13** : 99—100).

6. Six specialists have furnished comments on this case. Of these four support Professor Mertens' counter-proposal and two support Mr. Duellman's original proposal for the suppression of the specific name *venulosa* Laurenti. The specialists concerned are the following:—

- (a) *Specialists who support Professor Mertens' counter-proposal (conservation of the specific name "venulosa" Laurenti, 1768 (Rana) subject to the linking of the nominal species so named with the nominal species "Hyla zonata" Spix, 1824)*

Hobart M. Smith (*University of Illinois, Urbana, Illinois, U.S.A.*) (*Bull.* **12** : 307—308)

Arthur J. Loveridge (*Museum of Comparative Zoology at Harvard College, Cambridge, Massachusetts, U.S.A.*)

Karl P. Schmidt (*Chicago Natural History Museum, Chicago, Illinois, U.S.A.*) (*Bull.* **13** : 101)

James A. Peters (*Brown University, Providence, Rhode Island, U.S.A.*)¹

- (b) *Specialists who support Dr. Duellman's proposal for the suppression of the specific name "venulosa" Laurenti, 1768 (Rana)*

Edward H. Taylor (*University of Kansas, Lawrence, Kansas, U.S.A.*)

Jay. M. Savage (*University of Southern California, Los Angeles, California, U.S.A.*)

7. I have given careful consideration to the question of the procedure to be adopted for the presentation of this case for vote by the Commission, for it differs from most cases in which there is a difference of opinion among specialists by reason of the fact that all the specialists who have furnished comments give their support to the whole of Mr. Duellman's application with the single exception of the portion relating to the question whether the specific name *venulosa* Laurenti,

¹ As explained in paragraph 16 of the present *Opinion* Professor James A. Peters in July 1957—that is, nearly three months after the preparation of this Report—withdrawed the support which he had previously given to Professor Mertens' counter-proposal.

1768, as published in the combination *Rana venulosa*, should be conserved and interpreted or whether that name should be suppressed for nomenclatorial purposes. I have come to the conclusion that the most convenient course will be for the Commission to take its decision in two stages. At the first stage it would take a decision on the whole of the agreed portion of Mr. Duellman's application (i.e. the whole of the application, exclusive of the portion relating to the action to be taken in regard to the name *venulosa* Laurenti, 1768 (*Rana*)). At the second stage it would take a choice as between Professor Mertens' counter-proposal on the one hand and Mr. Duellman's original proposal (suppression of *venulosa*) on the other hand. I show in the Annexe attached to the present paper in Part I the effect of an affirmative vote on the non-controversial portion of Mr. Duellman's application, coupled with the acceptance of Professor Mertens' counter-proposal as regards the name *venulosa* Laurenti, while in Part 2 I show the effect of an affirmative vote on all parts of Mr. Duellman's proposal (i.e. an affirmative vote on the non-controversial portion, coupled with the rejection of Professor Mertens' proposal).

ANNEXE TO THE REPORT BY THE SECRETARY DATED
1st MAY 1957

Effect of affirmative votes on the Alternatives now submitted

PART 1
OF ANNEXE TO THE SECRETARY'S REPORT

Acceptance of Professor Mertens' counter-proposal as regards the species name "venulosa" Laurenti, 1768, as published in the combination "Rana venulosa", together with the non-controversial portions of Mr. Duellman's application.

- (1) Rejection of the proposal that the specific name *venulosa* Laurenti, 1768 as published in the combination *Rana venulosa*, be suppressed under the Plenary Powers ;
- (2) Use of the Plenary Powers :—
 - (a) to suppress the under-mentioned names for the purposes of the Law of Priority but not for those of the Law of Homonymy :—
 - (i) the generic name *Acrodytes* Fitzinger, 1843 ;
 - (ii) the specific name *tibiatrix* Laurenti, 1768, as published in the combination *Hyla tibiatrix* ;
 - (b) to direct that the nominal species *Rana venulosa* Laurenti, 1768, be interpreted by reference to the type specimen of *Hyla zonata* Spix, 1824 ;

- (3) Addition of the following name to the *Official List of Generic Names in Zoology* :—

Phrynohyas Fitzinger, 1843 (gender : feminine) (type species, by monotypy and through *Declaration 21* : *Rana venulosa* Laurenti, 1768, as interpreted under the Plenary Powers in (2)(b) above)

Note : At present the type species of *Phrynohyas* Fitzinger, 1843, is *Hyla zonata* Spix, 1824 (by monotypy) but if the action specified in (2)(b) above were to be taken under the Plenary Powers, the names *Hyla zonata* Spix, 1824, and *Rana venulosa* Laurenti, 1768, would become objective synonyms of one another and under *Declaration 21* the genus *Phrynohyas* Fitzinger would be cited as having the older of the two objectively identical nominal species (*Rana venulosa* Laurenti) as its type species.

- (4) Addition to the *Official List of Specific Names in Zoology* of :—

(a) *venulosa* Laurenti, 1768, as published in the combination *Rana venulosa* and as interpreted under the Plenary Powers in (2)(b) above (specific name of type species of *Phrynohyas* Fitzinger, 1843) ;

(b) *spilomma* Cope, 1877, as published in the combination *Hyla spilomma* ;

- (5) Addition to the *Official Index of Rejected and Invalid Generic Names in Zoology* of :—

Acrodytes Fitzinger, 1843, as suppressed under the Plenary Powers in (2)(a)(i) above ;

- (6) Addition to the *Official Index of Rejected and Invalid Specific Names in Zoology* of :—

(a) *tibiatrix* Laurenti, 1768, as published in the combination *Hyla tibiatrix*, as suppressed under the Plenary Powers in (2)(a)(ii) above ;

(b) *zonata* Spix, 1824, as published in the combination *Hyla zonata* (a junior objective synonym of *venulosa* Laurenti,

1768, as published in the combination *Rana venulosa*, through the action under the Plenary Powers in (2)(b) above).

PART 2
OF ANNEXE TO THE SECRETARY'S REPORT

Rejection of Professor Mertens' counter-proposal as regards the specific name "venulosa" Laurenti, 1768, as published in the combination "Rana venulosa", and acceptance of all the proposals submitted by Mr. Duellman

- (1) Rejection of the proposal that the specific name *venulosa* Laurenti, 1768, as published in the combination *Rana venulosa*, be interpreted under the Plenary Powers by reference to the type specimen of the nominal species *Hyla zonata* Spix, 1824 ;
- (2) Use of the Plenary Powers to suppress the under-mentioned names for the purposes of the Law of Priority but not for those of the Law of Homonymy :—
 - (a) the generic name *Acrodytes* Fitzinger, 1843 ;
 - (b) the following specific names :—
 - (i) *tibiatrix* Laurenti, 1768, as published in the combination *Hyla tibiatrix*
 - (ii) *venulosa* Laurenti, 1768, as published in the combination *Rana venulosa* ;
- (3) Addition of the following name to the *Official List of Generic Names in Zoology* of :—

Phrynohyas Fitzinger, 1843 (gender : feminine) (type species, by monotypy : *Hyla zonata* Spix, 1824) ;
- (4) Addition to the *Official List of Specific Names in Zoology* of :—
 - (a) *zonata* Spix, 1824, as published in the combination *Hyla zonata* (specific name of type species of *Phrynohyas* Fitzinger, 1843) ;
 - (b) *spilomma* Cope, 1877, as published in the combination *Hyla spilomma* ;

(5) Addition to the *Official Index of Rejected and Invalid Generic Names in Zoology* of :—

Acrodytes Fitzinger, 1843, as suppressed under the Plenary Powers in (2)(a) above ;

(6) Addition to the *Official Index of Rejected and Invalid Specific Names in Zoology* of :—

(a) *tibiatrix* Laurenti, 1768, as published in the combination *Hyla tibiatrix* and as suppressed under the Plenary Powers in (2)(b)(i) above ;

(b) *venulosa* Laurenti, 1768, as published in the combination *Rana venulosa* and as suppressed under the Plenary Powers in (2)(b)(ii) above.

III. THE DECISION TAKEN BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

21. Issue of Voting Paper V.P.(57)40 : On 15th May 1957 a Voting Paper (V.P.(57)40) was issued to the Members of the Commission in which for the reasons explained in paragraph 19 above the Members of the Commission were invited to vote on each of two separate Parts as follows :—

PART 1 OF VOTING PAPER

The portion of Mr. Duellman's application on which all the specialists who have furnished comments are in agreement with one another

I vote $\left. \begin{array}{l} \text{for} \\ \text{against} \end{array} \right\}^*$ the portion of Mr. William E. Duellman's application on which all the specialists who have furnished comments are

in agreement with one another, i.e. the portions relating to the suppression of the generic name *Acrodytes* Fitzinger, 1843, and the specific name *tibiatrix* Laurenti, 1768, (*Hyla*), the addition of the above names to the appropriate *Official Indexes* and the addition to the appropriate *Official Lists* of the generic name *Phrynohyas* Fitzinger, 1843, and the specific name *spilomma* Cope, 1877 (*Hyla*).

* Delete whichever alternative is inappropriate.

PART 2 OF VOTING PAPER

The “*Rana venulosa*” portion of Mr. Duellman’s application

I vote for the use of the Plenary Powers for the purpose of securing the adoption of one or other of the following Alternatives* :—

ALTERNATIVE “A” (Professor Mertens’ counter-proposal for the interpretation of the nominal species *Rana venulosa* Laurenti, 1768, by reference to the type specimen of *Hyla zonata* Spix, 1824)

or

ALTERNATIVE “B” (Mr. Duellman’s proposal for the suppression of the specific name *venulosa* Laurenti, 1768 (*Rana*) for nomenclatorial purposes).

* Delete whichever Alternative is inappropriate.

22. The Prescribed Voting Period : As the foregoing Voting Paper was issued under the Three-Month Rule, the Prescribed Voting Period closed on 15th August 1957.

23. Particulars of the Voting on Voting Paper V.P.(57)40 : At the close of the Prescribed Voting Period, the state of the voting on Voting Paper V.P.(57)40 was as follows :—

**(1) Particulars of the voting on Part 1 of Voting Paper
V.P.(57)40 :—**

- (a) *Affirmative Votes had been given by the following twenty-three (23) Commissioners (arranged in the order in which Votes were received) :*

Hering ; Vokes ; Lemche ; Holthuis ; Riley ; Jaczewski ;
Dymond ; do Amaral ; Esaki ; Hankó ; Stoll ; Mertens ;
Bodenheimer ; Boschma ; Key ; Bonnet ; Hemming ;
Sylvester-Bradley ; Cabrera ; Bradley (J.C.) ; Tortonese ;
Miller ; Prantl ;

- (b) *Negative Votes :*

None ;

- (c) *On Leave of Absence, two (2) :*

Mayr ; Kühnelt ;

- (d) *Voting Papers not returned :*

None.

**(2) Particulars of the voting on Part 2 of Voting Paper
V.P.(57)40 :—**

- (a) *In favour of Alternative "A" (Mertens plan), nineteen (19) votes :*

Hering ; Vokes ; Holthuis ; Riley ; Jaczewski ;
Dymond ; do Amaral ; Esaki ; Hankó ; Mertens ;
Bodenheimer ; Boschma ; Bonnet ; Hemming ;
Sylvester-Bradley ; Cabrera ; Bradley (J.C.) ; Tortonese ;
Miller ;

(b) *In favour of Alternative " B " (Duellman plan), four (4) votes :*

Lemche ; Stoll ; Key ; Prantl ;

(c) *On leave of Absence, two (2) :*

Mayr ; Kühnelt ;

(d) *Voting Papers not returned :*

None.

24. Declaration of Result of Vote : On 16th August 1957, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P.(57)40, signed a Certificate that the Votes cast were as set out in paragraph 23 above and declaring that the proposals submitted (i) in Part 1 of the above Voting Paper and (ii) in Part 2 thereof as Alternative "A" had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.

25. Preparation of the Ruling given in the present " Opinion " : On 19th February 1958 Mr. Hemming prepared the Ruling given in the present *Opinion* and at the same time signed a Certificate that the terms of that Ruling were in complete accord with those of the proposal approved by the International Commission in its Vote on Voting Paper V.P.(57)40.

26. Original References for Generic and Specific Names : The following are the original references for the generic and specific

names placed on *Official Lists* and *Official Indexes* by the Ruling given in the present *Opinion* :—

Acrodytes Fitzinger, 1843, *Syst. Rept.* : 30

Phrynohyas Fitzinger, 1843, *Syst. Rept.* : 30

spilomma, *Hyla*, Cope, 1877, *Proc. amer. phil. Soc.* **17** (100) : 86

tibiatrix, *Hyla*, Laurenti, 1768, *Specimen medic. exhib. Synops. Rept.* : 34

venulosa, *Rana*, Laurenti, 1768, *Specimen medic. exhib. Synops. Rept.* : 31

zonata, *Hyla*, Spix, 1824, *Anim. nov. . . . Testud. Ran. . . . Brasil.*:
41

27. Family-Group-Name Aspects : Dr. Robert Mertens (one of the applicants) has reported (*in litt.*) that no family-group-name problem arises in the present case, as the only nominal genus involved in the present case—*Phrynohyas* Fitzinger, 1843—has not been taken as the type genus of a family-group taxon and is currently referred to the family HYLIDAE.

28. Compliance with Prescribed Procedures : The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in dealing with the present case, and the present *Opinion* is accordingly hereby rendered in the name of the said International Commission by the under-signed Francis Hemming, Secretary to the International Commission on Zoological Nomenclature, in virtue of all and every the powers conferred upon him in that behalf.

29. "Opinion" Number : The present *Opinion* shall be known as *Opinion* Five Hundred and Twenty (520) of the International Commission on Zoological Nomenclature.

DONE in London, this Nineteenth day of February, Nineteen Hundred and Fifty-Eight.

*Secretary to the International Commission
on Zoological Nomenclature*

FRANCIS HEMMING